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EXAMINER
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QUINONES, ISMAEL C

ART UNIT	PAPER NUMBER
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2686

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5

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/769,939

**Applicant(s)**

CALVERT ET AL.

**Examiner**

Ismael Quiñones

**Art Unit**

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: \_\_\_\_\_

***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on September 10, 2002 has being considered by the examiner and made of record in the application file.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. **Claims 1-19 and 22-42** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (U.S. Pat. No. 6,289,279) in view of Mohi et al. (U.S. P.G.-Pub. No. 2003/0195008).

Regarding **claim 1**, Ito et al. disclose a method for a system infrastructure of a wireless communication system to accurately locate a communication device in the wireless communication system (A positioning system method to measure the current

position of the device, *col. 1, lines 6-9*), the method comprising the steps of: determining an approximate geographic location of the communication device (Approximate geographic location such as primary position data based on data transmitted from the system base station, in which the primary position data comprises the current position of the portable terminal such as a communication device; *col. 3, 14-20*); based on the approximate geographic location, determining a more accurate geographic location of the communication device (Wherein the portable terminal/communication device comprises a GPS receiver for means of obtaining a more accurate position and later comparing such position data using a position-data function correction data, in which the step of determining a secondary position depends upon estimating a primary position by the system base station wherein the process is arranged in a sequential manner; *col. 1, lines 21-41*). Ito et al. fail to clearly specify based on the approximate geographic location, a transmitted request for a more accurate geographic location, receiving from the communication device the more accurate geographic location, and conveying the more accurate geographic location to a target device.

However in the same field of endeavor Mohi et al. disclose wherein the a request is made to a communication device for a more accurate location (Wherein the request is made from the system through mobile controller or portable terminal such as hand held device to ascertain the precise position/location of a rover/communication device or portable terminal, wherein the approach of ascertaining the precise location of the rover/communication device comprises the steps of computing relative differential corrections from measurements taken at the controller and the rover, wherein an

approximate geographic location is linked by using pseudo-range residual from the measurement taken at the controller; *Page 3, Paragraph 57; Page 7, Paragraph 103; Page 11, Paragraph 145*), receiving from the communication device the more accurate geographic location (Wherein an approach for transmitting a more accurate geographic location comprises the steps of measuring the location of the rover/communication device within itself and transmitting its more accurate location to the network for computing relative differential corrections; *Page 11, Page 145*), and conveying the more accurate geographic location to a target device (Wherein such relative differential corrections can be generated within the network and subsequently transmitting those corrections pertaining a more accurate location to a target device, wherein such target device is the controller itself; *Page 11, Page 145; Page 2, Paragraph 20*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ito et al. position system for determining a more accurate position based on GPS and land based techniques to include Mohi et al. location system based on a request and subsequently transmitting the location of a target device in a more accurate fashion. For the purpose of a caller/user managing tasks such as location, wherein a location is requested by the particular user and determining an approximate location based on a initial location request, subsequently transmitting a more accurate location determination to the system for means of retrieving such information within the system/network for means of error correction or differential relative corrections procedures performed within the network and ultimately conveying such information or data to a target device.

Regarding **claim 2**, and as applied to claim 1, Ito et al. in view of Mohi et al. disclose the aforementioned method. In addition Mohi et al. disclose the aforementioned method further comprising the step of, prior to the step of determining the approximate geographic location of the communication device, receiving a request for a geographic location of the communication device from a requesting device (A requesting device such as a controller requesting to find a rover or a communication device; *Page 7, Paragraphs 103 and 108*), the request identifying the target device (A function or action "FIND" to request location of a particular communication device/rover who displays a list of names pertaining the rovers or communication devices and subsequently identified by the controller/requesting device by selecting one of the communication device displayed; *Page 5, Paragraphs 74-75; Figure 12, item 76*).

Regarding **claim 3**, and as applied to claim 2, Ito et al. disclose a method for a system infrastructure of a wireless communication system to accurately locate a communication device in the wireless communication system. In addition Mohi et al. disclose wherein the requesting device is the target device. (A requesting device such as mobile controller that can track a plurality of communication devices such as mobile controllers and rovers, and conveying such location information to the controller; *Page 3, Paragraph 57; Page 8, Paragraphs 111 and 115*).

Regarding **claim 4**, and as applied to claim 2, Ito et al. disclose the aforementioned method. Ito et al. fail to clearly specify wherein the requesting device is the communication device.

However in the same field of endeavor Mohi et al. disclose a location detection system wherein the requesting device is the target device (A communication device such as mobile controller that can track a plurality of communication devices such as mobile controllers and rovers, and in addition such controller can request to discern his own location to be provided on a map displayed within the mobile controller; *Page 3, Paragraph 58; Page 8, Paragraphs 111 and 115; Page 11, Paragraph 143*).

Therefore it would have been obvious to one with ordinary skill in the art at the time invention was made to have Ito et al. positioning system to include features such as self-position/location determining features as taught by Mohi et al. For the purpose of navigation within a particular area, subsequently determining the area characteristics such as traffic information or particular area situation information.

Regarding **claim 5**, and as applied to claim 1, Ito et al. in view of Mohi et al. disclose the aforementioned method. In addition Ito et al. disclose wherein the step of transmitting further comprises the step of transmitting to the communication device a map of an area that includes the approximate geographic location of the communication device (Wherein a portable terminal or communication device information-processing part displays on a map the current position of the device based on the primary position data or approximate geographic location; *col. 5, lines 33-36 and lines 48-52*).

Regarding **claim 6**, and as applied to claim 1, Ito et al. in view of Mohi et al. disclose the aforementioned method. In addition Ito et al. disclose wherein the step of receiving the more accurate geographic location comprises the step of receiving information identifying a location of the communication device on the map (A portable

terminal or device executing a map-display software program using position data obtained using the GPS signals sent from GPS satellites wherein such position data is more accurate than the approximate data sent by the system base station; *col. 5, lines 37-52*).

Regarding **claim 7**, and as applied to claim 6, Ito et al. disclose the aforementioned method. Ito et al. fail to clearly specify wherein the information identifying a location of the communication device on the map comprises a modified representation of the map indicating the location of the communication device.

However in the same field of endeavor Mohi et al. disclose wherein the information identifying a location of the communication device on the map comprises a modified representation of the map indicating the location of the communication device (A modified representation of the map for providing an spatial or relative location of the communication device such as an icon or arrow displayed within the map; *Page 1, Paragraph 3; Page 3, Paragraphs 58-59; Page 5, Paragraphs 80-81; Page 6, Paragraph 98; Figure 17*).

Therefore it would have been obvious to one with ordinary skill in the art at the time invention was made to have Ito et al. positioning system for means of providing precise/accurate position to include graphical illustrations to display such accurate position/location as taught by Mohi et al. For the purpose of presenting a detailed graphical representation, for means of displaying such information to a particular communication device user or other communication devices and relatively position themselves within a geographical area map.



Regarding **claim 8**, and as applied to claim 7, Ito et al. disclose the aforementioned method. Ito et al. fail to clearly specify wherein the information identifying a location of the communication device on the map further comprises textual information and graphical information further identifying the location of the communication device.

However in the same field of endeavor Mohi et al. disclose wherein the information identifying a location of the communication device on the map further comprises textual information and graphical information further identifying the location of the communication device (Presenting the user/controller location information in various visual formats depending on the capabilities of the device, wherein such formats can comprise mapping visuals or text messages providing the device location; *Page 8, Paragraph 113*).

Therefore it would have been obvious to one with ordinary skill in the art at the time invention was made to have Ito et al. positioning system for means of providing precise/accurate position to include display formats such as graphical and textual location information as taught by Mohi et al. For the purpose of providing a variety of location information or mapping data to a wide range of communication devices with different display or graphical capabilities.

Regarding **claim 9**, and as applied to claim 5, Ito et al. in view of Mohi et al. disclose the aforementioned method comprising the step of receiving a more accurate geographic location. In addition, Mohi et al. disclose wherein the step of receiving the more accurate geographic location further comprises the step of receiving information

identifying a second approximate location of the communication device on the map (Continuing data sent from the communication device to the target device for means of updating the current geographic location of the communication device on the map during location gathering periods to allow for real-time very accurate location tracking of the communication device; *Page , Paragraph 59; Page Paragraph 81 ; Page 8 Paragraph 108*) and a request for a second map corresponding to an area that includes the second approximate location (The target device identifying another location within the map display for means of requesting a more detailed information; *Page 11, Paragraph 141*), the second map being of a higher resolution than the map of the area that includes the approximate geographic location of the communication device (Wherein the more detailed information within the map display is requested by means of amplifying or zooming the location of the communication device, as well as means for centering location on the map display; *Page 3; Paragraph 59*), and wherein the method further comprises the step of transmitting the second map to the communication device (Wherein the location information is transmitted to a hand-held device such as the controller/target device or rover/communication device; and wherein at times the requesting device is the communication device for means of ascertaining its own location on a map display; *Page 3, Paragraph 57-58; Page 8, Paragraphs 111 and 115; Page 11, Paragraph 143* ).

Regarding **claim 10**, and as applied to claim 9, Ito et al. in view of Mohi et al. disclose the aforementioned method comprising the step of receiving a more accurate geographic location. In addition, Mohi et al. disclose wherein the step of receiving the more accurate geographic location further comprises the step of receiving information

identifying a location of the communication device on the second map (The target device identifying another location within the map display for means of requesting a more detailed information; *Page 1 Paragraph 3; Page 3, Paragraphs 58-59; Page 5, Paragraphs 80-81; Page 6, Paragraph 98; Page 11; Paragraph 141; Figure 17*).

Regarding **claim 11**, and as applied to claim 1, Ito et al. in view of Mohi et al. disclose the aforementioned method. In addition, Mohi et al. disclose wherein the step of transmitting further comprises the step of transmitting to the communication device a textual description of an area that includes the approximate geographic location of the communication device (Presenting the communication device location information in various visual formats depending on the capabilities of the device, wherein such formats can comprise text messages providing the device location; *Page 8, Paragraph 113*).

Regarding **claim 12**, and as applied to claim 1, Ito et al. in view of Mohi et al. disclose the aforementioned method. In addition Mohi et al. disclose wherein the step of determining an approximate geographic location of the communication device comprises the steps of: transmitting a request to the communication device for the approximate geographic location (Wherein the request is made from the system through mobile controller or portable terminal such as hand held device to ascertain the precise position/location of a rover/communication device or portable terminal, wherein the approach of ascertaining the precise location of the rover/communication device comprises the steps of computing relative differential corrections from measurements taken at the controller and the rover, wherein an approximate geographic location is linked by using pseudo-range residual from the measurement taken at the controller;

*Page 3, Paragraph 57; Page 7, Paragraph 103; Page 11, Paragraph 145*); and receiving the approximate geographic location from the communication device responsive to the transmitted request (Wherein an approach for transmitting a more accurate geographic location comprises the steps of measuring the location of the rover/communication device within itself and transmitting its more accurate location to the network for computing relative differential corrections, wherein such relative differential corrections can be generated within the network and subsequently transmitting such those correction pertaining for a more accurate location to a target device, wherein such target device is the controller itself; *Page 2, Paragraph 20; Page 11, Page 145*).

Regarding **claim 13**, and as applied to claim 1, Ito et al. in view of Mohi et al. disclose the aforementioned method. In addition Ito et al. disclose wherein the step of conveying the more accurate geographic location to the target device comprises the step of conveying a map to the target device, wherein the map indicates the more accurate geographic location (A portable terminal or device executing a map-display software program using position data obtained using the GPS signals sent from GPS satellites wherein such position data is more accurate than the approximate data sent by the system base station; *col. 5, lines 37-52*).

Regarding **claim 14**, and as applied to claim 1, Ito et al. in view of Mohi et al. disclose the aforementioned method. In addition Mohi et al. disclose wherein the step of conveying the more accurate geographic location to the target device comprises the step of conveying a textual description of the more accurate geographic location to the target device (Presenting the user/controller/communication device location information in

various visual formats depending on the capabilities of the device, wherein such formats can comprise text messages providing the device location; *Page 8, Paragraph 113*).

Regarding **claim 15**, and as applied to claim 1, Ito et al. disclose a method for a system infrastructure of a wireless communication system to accurately locate a communication device in the wireless communication system. Ito et al. fail to clearly specify wherein the more accurate geographic location includes information indicating a height of the communication device.

However in the same field of endeavor, Ito et al. disclose wherein the more accurate geographic location includes information indicating a height of the communication device (Usable features that contains information about the communication device's height usually represented in a 3D vector that holds the respective information; *Page 2, Paragraph 23; Page 5, Paragraph 80; Page 6, Paragraph 87*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ito et al. positioning system include relative height calculations concerning the exact location/position of the communication device as taught by Mohi et al. For the purpose of being acquainted with the exact location of the communication device for aiding or providing emergency assistance to a caller/user of a communication device for a situation in which the caller/user is located in a high elevation structure such as a high rise building.

Regarding **claim 16**, and as applied to claim 1, Ito et al. disclose the aforementioned method, further comprising the step of: determining a location of the

target device. Ito et al. fail to clearly specify the aforementioned method further comprising the step of: conveying supplemental information related to both the location of the target device and the more accurate geographic location of the communication device to the target device.

However in the same field on endeavor, Mohi et al. disclose the aforementioned method further comprising the step of: conveying supplemental information related to both the location of the target device and the more accurate geographic location of the communication device to the target device (Wherein a device requesting location such as a controller includes features or supplemental information such as distance relative to a communication device such as a rover, the communication device historical trial of positions, and velocity; *Page 2, Paragraphs 23-24; Page 3, Paragraph 58*) .

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to include Ito et al. positioning system to have additional features for conveying supplemental information as taught by Mohi et al. For the purpose of representing the communication device in a detailed manner applied to a variety of applications such as delivery, meeting time, traffic directions, navigation, etc.

Regarding **claim 17**, and as applied to claim 16, Ito et al. in view of Mohi et al. disclose the aforementioned method. In addition, Mohi et al. disclose wherein the supplemental information is based on a distance between the communication device and the target device (Information relating to a rover/communication device provided to the controller including distance from the controller to the rover; *Pages 1-2, Paragraph 20-21; Page 4, Paragraph 60*).

Regarding **claim 18**, and as applied to claim 17, Ito et al. in view of Mohi et al. disclose the aforementioned method. In addition Mohi et al. disclose wherein the supplemental information comprises at least one of a city, a state, and a country when the communication device is located a substantial distance from the target device (An absolute position such as location in a coordinate system between the controller/portable terminal and the rover/communication device expressed and displayed in forms such as street intersection, address, neighborhood, etc.; *Page 2, Paragraphs 21 and 27; Page 3, Paragraph 58; Page 8, Paragraph 120; Page 2, Paragraph 20*).

Regarding **claim 19**, and as applied to claim 16, Ito et al. in view of Mohi et al. disclose the aforementioned method. In addition Mohi et al. disclose wherein the supplemental information comprises at least one of directions to the more accurate geographic location of the communication device from the location of the target device (Supplemental information for means of directions between the communication device and the target device such as address, latitude and longitude coordinates, street intersection, *Page 2, Paragraphs 21 and 27*), an approximate distance between the more accurate geographic location of the communication device and the location of the target device (Information relating to a rover/communication device provided to the controller including distance from the controller to the rover; *Page 1-2, Paragraphs 20-21; Page 4, Paragraph 60*), and an approximate commute time between the location of the target device and the more accurate geographic location of the communication device (Wherein such supplemental information includes features such as traveling speed of the rover or communication device, the relative distance between the communication device/rover

and the target device/controller, and the instantaneous time or the time in which the location information was captured by the rover/communication device. Therefore calculating a feature such as the rover speed, a features such as the travel time or commute time between the rover and controller is known in order to carry out such calculation; *Page 3, Paragraph 58; Page 6, Paragraph 88*).

Regarding **claim 22**, Ito et al. in view of Mohi et al. disclose a method for a communication device to assist a system infrastructure of a wireless communication system in providing an accurate geographic location of the communication device to a target device (Wherein the portable terminal/communication device comprises a GPS receiver for means of obtaining a more accurate position and later comparing such position data using a position-data function correction data, in which the step of determining a secondary position depends upon estimating a primary position by the system base station wherein the process is arranged in a sequential manner; *See Ito et al. at U.S. Pat. No. 6,289,279; col. 1, lines 21-41*). In addition, Mohi et al. disclose the method comprising the steps of: receiving, from the system infrastructure, at least a request for an accurate geographic location of the communication device (Wherein the request is made from the system through mobile controller or portable terminal such as hand held device to ascertain the precise position/location of a rover/communication device or portable terminal, wherein the approach of ascertaining the precise location of the rover/communication device comprises the steps of computing relative differential corrections from measurements taken at the controller and the rover, wherein an approximate geographic location is linked by using pseudo-range residual from the



measurement taken at the controller; *Page 3, Paragraph 57; Page 7, Paragraph 103; Page 11, Paragraph 145*); displaying the request to a user of the communication device (Where a controller/user request to find a communication device and such rover is adapted to have its location displayed; *Page 8, Paragraphs 108 and 118*); receiving, from the user, the accurate geographic location of the communication device (Wherein an approach for transmitting a more accurate geographic location comprises the steps of measuring the location of the rover/communication device within itself and transmitting its more accurate location to the network for computing relative differential corrections; *Page 11, Page 145*); and transmitting the accurate geographic location to the system infrastructure for subsequent delivery to the target device (Wherein such relative differential corrections can be generated within the network and subsequently transmitting such those correction pertaining for a more accurate location to a target device, wherein such target device is the controller itself; *Page 11, Page 145; Page 2, Paragraph 20*).

Regarding **claim 23**, and as applied to claim 22, Ito et al. in view of Mohi et al. disclose the aforementioned method. In addition Ito et al. disclose wherein the step of receiving at least a request further comprises the step of receiving a map of an area that includes an approximate location of the communication device (Wherein a portable terminal or communication device information-processing part displays on a map the current position of the device based on the primary position data or approximate geographic location; *col. 5, lines 33-36 and lines 48-52*).

Regarding **claim 24**, and as applied to claim 23, Ito et al. in view of Mohi et al. disclose the aforementioned method. In addition Ito et al. disclose the aforementioned method wherein the step of displaying further comprises the step of displaying the map to the user (Wherein a portable terminal or communication device information-processing part displays on a map the current position of the device based on the primary position data or approximate geographic location; *col. 5, lines 33-36 and lines 48-52*).

Regarding **claim 25**, and as applied to claim 24, Ito et al. in view of Mohi et al. disclose the aforementioned method. In addition Mohi et al. disclose wherein the step of receiving the accurate geographic location further comprises the step of receiving an indication on the map corresponding to a location of the communication device (An indication on the map for providing an spatial or relative location of the communication device such as an icon or arrow displayed within the map; *Page 1 Paragraph 3; Page 3, Paragraphs 58-59; Page 5, Paragraphs 80-81; Page 6, Paragraph 98; Figure 17*).

Regarding **claim 26**, and as applied to claim 25, Ito et al. in view of Mohi et al. disclose the aforementioned method. In addition Mohi et al. disclose wherein the step of transmitting the accurate geographic location further comprises the step of transmitting a modified representation of the map (A modified representation of the map for providing an spatial or relative location of the communication device such as an icon or arrow displayed within the map; *Page 1 Paragraph 3; Page 3, Paragraphs 58-59; Page 5, Paragraphs 80-81; Page 6, Paragraph 98; Figure 17*) that includes the indication corresponding to the location of the communication device.

Regarding **claim 27**, and as applied to claim 24, Ito et al. in view of Mohi et al. disclose the aforementioned method comprising the step of receiving a more accurate geographic location. In addition, Mohi et al. disclose wherein the step of receiving the accurate geographic location further comprises the steps of: receiving an indication on the map corresponding to a second approximate location of the communication device (Means for identifying another location within the map display for means of requesting a more detailed information; *Page 1 Paragraph 3; Page 3, Paragraphs 58-59; Page 5, Paragraphs 80-81; Page 6, Paragraph 98; Page 11; Paragraph 141; Figure 17*), the second approximate location being more accurate than the approximate location (Continuing data sent from the communication device to the target device for means of updating the current geographic location of the communication device on the map during location gathering periods to allow for real-time very accurate location tracking of the communication device; *Page , Paragraph 59; Page Paragraph 81 ; Page 8 Paragraph 108*); and receiving a request for a second map corresponding to an area that includes the second approximate location of the communication device (The target device identifying another location within the map display for means of requesting a more detailed information; *Page 11, Paragraph 141*), the second map being of a higher resolution than the map of the area that includes the approximate location of the communication device (Wherein the more detailed information within the map display is requested by means of amplifying or zooming the location of the communication device, as well as means for centering location on the map display; *Page 3; Paragraph 59*).

Regarding **claim 28**, and as applied to claim 27, Ito et al. in view of Mohi et al. disclose the aforementioned method. In addition Mohi et al. disclose wherein the step of transmitting the accurate geographic location further comprises the step of transmitting the second approximate location of the communication device and the request for the second map (Differential corrections pertaining a more accurate location to a target device generated within the network and subsequently transmitted to a target device/controller; *Page 11, Page 145; Page 2, Paragraph 20*).

Regarding **claim 29**, and as applied to claim 28, Ito et al. in view of Mohi et al. disclose the aforementioned method. In addition Mohi et al. disclose the aforementioned method further comprising the steps of: receiving the second map (Continuing data sent from the communication device to the target device for means of updating the current geographic location of the communication device on the map during location gathering periods to allow for real-time very accurate location tracking of the communication device; *Page 3, Paragraph 59; Page Paragraph 81; Page 8 Paragraph 108*); displaying the second map to the user (Information amplified, or centered within the map display by for means of presenting a second view or detailed geographical location; *Page 3; Paragraph 59*); and receiving, from the user, an indication on the second map corresponding to a location of the communication device to produce the accurate geographic location of the communication device (An indication on the map for providing an spatial or relative location of the communication device such as an icon or arrow displayed within the map; *Page 1, Paragraph 3; Page 3, Paragraphs 58-59; Page 5, Paragraphs 80-81; Page 6, Paragraph 98; Figure 17*).

Regarding **claim 30**, and as applied to claim 29, Ito et al. in view of Mohi et al. disclose the aforementioned method for transmitting an accurate geographic location. In addition Mohi et al. disclose wherein the step of transmitting the accurate geographic location comprises the step of transmitting a modified representation of the second map that includes the indication corresponding to the location of the communication device (A modified representation of the map for providing an spatial or relative location of the communication device such as an icon or arrow displayed within the map; *Page 1, Paragraph 3; Page 3, Paragraphs 58-59; Page 5, Paragraphs 80-81; Page 6, Paragraph 98; Figure 17*).

Regarding **claim 31**, and as applied to claim 22, Ito et al. in view of Mohi et al. disclose the aforementioned method. In addition Mohi et al. disclose wherein the accurate geographic location of the communication device includes information indicating a height of the communication device (Usable features that contains information about the communication device's height usually represented in a 3D vector that holds the respective information; *Page 2, Paragraph 23, Page 5, Paragraph 80; Page 6, Paragraph 87*).

Regarding **claim 32**, and as applied to claim 22, Ito et al. in view of Mohi et al. disclose the aforementioned method. In addition Mohi et al. disclose the aforementioned method, further comprising the steps of: prior to receiving at least the request, receiving a map of an area that includes an approximate geographic location of the communication device (Wherein a communication device receives instructions to provide its accurate location, such instructions received through a cellular transceiver; *Page 4, Paragraphs*

71-72; *Figure 2, item 14; Page 8, Paragraph 118*); and storing the map in a memory of the communication device (Wherein such communication device comprises a CPU module for means of storing or retrieving position information; *Page 4, Paragraph 72; Page 9; Paragraph 125; Figure 19b, item 340*); wherein the step of displaying comprises the step of automatically displaying the map responsive to receiving the request (Where a controller/user request to find a communication device and such rover is adapted to have its location displayed; *Page 8, Paragraphs 108 and 118*) and wherein the step of receiving the accurate geographic location comprises the step of receiving an indication on the map corresponding to a location of the communication device (An indication on the map for providing an spatial or relative location of the communication device such as an icon or arrow displayed within the map; *Page 1 Paragraph 3; Page 3, Paragraphs 58-59; Page 5, Paragraphs 80-81; Page 6, Paragraph 98; Figure 17*).

Regarding **claim 33**, Ito et al. disclose in view of Mohi et al. a method for a communication device to assist a system infrastructure of a wireless communication system in providing an accurate geographic location of the communication device to a target device (Wherein the portable terminal/communication device comprises a GPS receiver for means of obtaining a more accurate position and later comparing such position data using a position-data function correction data, in which the step of determining a secondary position depends upon estimating a primary position by the system base station wherein the process is arranged in a sequential manner; *See Ito et al. at U.S. Pat. No. 6,289,279; col. 1, lines 21-41*). In addition Mohi et al. disclose said method comprising the steps of: receiving, from the system infrastructure, a request for

an accurate geographic location of the communication device and a map of an area that includes an approximate geographic location of the communication device (Wherein the request is made from the system through mobile controller or portable terminal such as hand held device for the location of a communication device/rover, the rover receiving measurements for corresponding to its approximate location; furthermore the rover comprising the same functional capabilities of the controller as both described herein as hand held devices, therefore presenting such information in a graphical display such as a map; *Page 3, Paragraph 57; Page 5, Paragraph 81; Page 7, Paragraph 103; Page 8, Paragraphs 108 and 118; Page 11, Paragraph 145*); displaying at least the map to a user of the communication device (Wherein a portable terminal or communication device information-processing art displays on a map the current position of the device based on the primary position data or approximate geographic location; *col. 5, lines 33-36 and lines 48-52*); receiving, from the user, an indication on the map corresponding to a location of the communication device (An indication on the map for providing an spatial or relative location of the communication device such as an icon or arrow displayed within the map; *Page 1 Paragraph 3; Page 3, Paragraphs 58-59; Page 5, Paragraphs 80-81; Page 6, Paragraph 98; Figure 17*); and conveying the location of the communication device to the system infrastructure for subsequent delivery to the target device (Wherein such relative differential corrections can be generated within the network and subsequently transmitting those corrections pertaining a more accurate location to a target device, wherein such target device is the controller itself; *Page 11, Page 145; Page 2, Paragraph 20*).

Regarding **claim 34**, and as applied to claim 33, Ito et al. in view of Mohi et al. disclose the aforementioned method. In addition Mohi et al. disclose wherein the location of the communication device comprises information indicating a height of the communication device (Usable features that contains information about the communication device's height usually represented in a 3D vector that holds the respective information; *Page 2, Paragraph 23, Page 5, Paragraph 80; Page 6, Paragraph 87*).

Regarding **claim 35**, Ito et al. in view of Mohi et al. disclose a method for a communication device to assist a system infrastructure of a wireless communication system in providing an accurate geographic location of the communication device to a target device (A positioning system method to measure the current position of the device, wherein the portable terminal/communication device comprises a GPS receiver for means of obtaining a more accurate position and later comparing such position data using a position-data function correction data, in which the step of determining a secondary position depends upon estimating a primary position by the system base station wherein the process is arranged in a sequential manner; *col. 1 lines 6-9 and lines 21-41; See Ito et al. at U.S. Pat. No. U.S. Pat. No. 6,289,279*). In addition Mohi et al. disclose the method comprising the steps of: receiving, from the system infrastructure, a request for an accurate geographic location of the communication device (Wherein the request is made from the system through mobile controller or portable terminal such as hand held device to ascertain the precise position/location of a rover/communication device or portable terminal, wherein the approach of ascertaining the precise location of the



rover/communication device comprises the steps of computing relative differential corrections from measurements taken at the controller and the rover, wherein an approximate geographic location is linked by using pseudo-range residual from the measurement taken at the controller; *Page 3, Paragraph 57; Page 7, Paragraph 103; Page 11, Paragraph 145*) and a first map of an area that includes a first approximate geographic location of the communication device (A map that includes the rover/communication device geographic location; *col. 5, lines 33-36 and lines 48-52*); displaying at least the first map to a user of the communication device (Wherein a portable terminal or communication device information-processing part displays on a map the current position of the device based on the primary position data or approximate geographic location; *col. 5, lines 33-36 and lines 48-52*); receiving, from the user, an indication on the first map corresponding to a second approximate geographic location of the communication device (An indication on the map for providing an spatial or relative location of the communication device such as an icon or arrow displayed within the map; *Page 1 Paragraph 3; Page 3, Paragraphs 58-59; Page 5, Paragraphs 80-81; Page 6, Paragraph 98; Figure 17*), the second approximate geographic location being more accurate than the first approximate geographic location (Ascertaining the precise location of the rover/communication device comprising the steps of computing relative differential corrections from measurements taken at the communication device, wherein an approximate geographic location is linked by using pseudo-range residual from the measurement taken at the controller; *Page 3, Paragraph 57; Page 7, Paragraph 103; Page 11, Paragraph 145*); conveying the second approximate geographic location and a

request for a second map to the system infrastructure (Continuing data sent from the communication device to the target device for means of updating the current geographic location of the communication device on the map during location gathering periods to allow for real-time very accurate location tracking of the communication device; *Page , Paragraph 59; Page Paragraph 81 ; Page 8 Paragraph 108*); receiving the second map from the system infrastructure (Corrections made for the communication device geographical location applied at the system infrastructure of the wireless network, received from measurements taken at the communication device; *Page 11, Paragraph 145*), the second map corresponding to an area that includes the second approximate geographic location and being of a higher resolution than the first map (Wherein the more detailed information within the map display is requested by means of amplifying or zooming the location of the communication device, as well as means for centering location on the map display; *Page 3; Paragraph 59*); displaying the second map to the user of the communication device (Location information provided or showed on a handset such as a communication device; *Pages 10-11, Paragraph 141*); receiving, from the user , an indication on the second map corresponding to a location of the communication device (The target device identifying another location within the map display for means of requesting a more detailed information; *Page 1 Paragraph 3; Page 3, Paragraphs 58-59; Page 5, Paragraphs 80-81; Page 6, Paragraph 98; Page 11; Paragraph 141; Figure 17*); and conveying the location of the communication device to the system infrastructure for subsequent delivery to the target device (A user requesting

more detailed geographic location within a graphical display, for means ultimately conveying such information to a target device; *Page 11; Paragraph 141*).

Regarding **claim 36**, Ito et al. in view of Mohi et al. disclose a communication device accurately located within the system infrastructure of a wireless communication system, (An approximate geographic location such as primary position data based on data transmitted from the system base station, in which the primary position data comprises the current position of the portable terminal such as a communication device; *See Ito et al. at U.S. Pat. No. 6,289,279; col. 3, lines 14-20*). In addition Mohi et al. disclose wherein the communication device comprises: a receiver for receiving, from a system infrastructure of a wireless communication system, at least a request for an accurate geographic location of the communication device (Wherein a communication device receives instructions to provide its accurate location, such instructions received through a cellular transceiver; *Page 4, Paragraphs 71-72; Figure 2, item 14; Page 8, Paragraph 118*); a display, operably coupled to the receiver, for displaying the request to a user of the communication device (Where a controller/user request to find a communication device/rover and such rover is adapted to have its location displayed; *Page 8, Paragraphs 108 and 118*); a user input device for receiving, from the user, information corresponding to the accurate geographic location of the communication device (Wherein the approach of ascertaining the precise position/location of a rover/communication device or portable terminal, comprises the steps of computing relative differential corrections from measurements taken at the rover, inputted by a GPS satellite; *Page 3, Paragraph 57; Page 7, Paragraph 103; Page 11, Paragraph 145*); and a transmitter, operably coupled to

the user input device, for transmitting the accurate geographic location to the system infrastructure for subsequent delivery to a target device (Wherein such relative differential corrections can be generated within the network and subsequently transmitting those correction pertaining a more accurate location to a target device, wherein such target device is the controller itself; *Page 11, Page 145; Page 2, Paragraph 20*).

Regarding **claim 37**, and as applied to claim 36, Ito et al. in view of Mohi et al. disclose the aforementioned communication device. In addition Mohi et al. disclose wherein the at least a request includes a map of an area that includes an approximate location of the communication device (Wherein the request is made from the system through mobile controller or portable terminal such as hand held device for the location of a communication device/rover, the rover receiving measurements for corresponding to its approximate location; furthermore the rover comprising the same functional capabilities of the controller as both described herein as hand held devices, therefore presenting such information in a graphical display such as a map; *Page 3, Paragraph 57; Page 5, Paragraph 81; Page 7, Paragraph 103; Page 8, Paragraphs 108 and 118; Page 11, Paragraph 145*).

Regarding **claim 38**, and as applied to claim 37, Ito et al. in view of Mohi et al. disclose the aforementioned communication. In addition Mohi et al. disclose wherein the display further displays the map (Wherein the request is made from the system through mobile controller or portable terminal such as hand held device for the location of a communication device/rover, the rover receiving measurements for corresponding to its

approximate location; furthermore the rover comprising the same functional capabilities of the controller as both described herein as hand held devices, therefore presenting such information in a graphical display such as a map; *Page 3, Paragraph 57; Page 5, Paragraph 81; Page 7, Paragraph 103; Page 8, Paragraphs 108 and 118; Page 11, Paragraph 145*).

Regarding **claim 39**, and as applied to claim 38, Ito et al. in view of Mohi et al. disclose the aforementioned communication device. In addition Mohi et al. disclose wherein the information corresponding to the accurate geographic location of the communication device comprises an indication on the map corresponding to a location of the communication device (An indication on the map for providing an spatial or relative location of the communication device such as an icon or arrow displayed within the map; *Page 1 Paragraph 3; Page 3, Paragraphs 58-59; Page 5, Paragraphs 80-81; Page 6, Paragraph 98; Figure 17*).

Regarding **claim 40**, and as applied to claim 36, Ito et al. in view of Mohi et al. disclose the aforementioned communication device. In addition Mohi et al. disclose wherein the user input device comprises at least one of a keypad, a computer mouse, a touchpad, a touchscreen, a trackball, and a keyboard (Wherein the controller/requesting device and the communication device/rover are both described herein as personal hand held units both including architectural features such as a touchscreen, and a conventional button/touchpad, *Page 3, Paragraph 57; Page 4, Paragraph 71*).

Regarding **claim 41**, Ito et al. in view of Mohi et al. disclose a communication device. In addition Mohi et al. disclose the aforesaid communication device comprising:

a receiver for receiving, from a system infrastructure of a wireless communication system, a request for an accurate geographic location of the communication device (Wherein a communication device receives instructions to provide its accurate location, such instructions received through a cellular transceiver; *Page 4, Paragraphs 71-72; Figure 2, item 14; Page 8, Paragraph 118*) and a map of an area that includes an approximate geographic location of the communication device (Wherein a communication device receives instructions to provide its accurate location, such instructions received through a cellular transceiver; *Page 4, Paragraphs 71-72; Figure 2, item 14; Page 8, Paragraph 118*); a display, operably coupled to the receiver, for displaying at least the map to a user of the communication device (Where a controller/user request to find a rover/communication device and such rover is adapted to have its location displayed; *Page 8, Paragraphs 108 and 118*); a user input device for receiving, from the user, an indication on the map corresponding to a location of the communication device (An indication on the map for providing an spatial or relative location of the communication device such as an icon or arrow displayed within the map; *Page 1 Paragraph 3; Page 3, Paragraphs 58-59; Page 5, Paragraphs 80-81; Page 6, Paragraph 98; Figure 17*); and a transmitter, operably coupled to the user input device, for transmitting the location of the communication device to the system infrastructure (Wherein such relative differential corrections can be generated within the network and subsequently transmitting those correction pertaining a more accurate location to a target device, wherein such target device is the controller itself; *Page 11, Page 145; Page 2, Paragraph 20*).

Regarding **claim 42**, and as applied to claim 41, Ito et al. in view of Mohi et al. disclose the aforementioned communication device. In addition Mohi et al. disclose wherein the user input device comprises at least one of a keypad, a computer mouse, a touchpad, a touchscreen, a trackball, and a keyboard (Wherein the controller/requesting device and the communication device/rover are both described herein as personal hand held units both including architectural features such as a touchscreen, and a conventional button/touchpad, *Page 3, Paragraph 57; Page 4, Paragraph 71*).

5. **Claims 20-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (U.S. Pat. No. 6,289,279) in view of Mohi et al. (U.S. P.G.-Pub. No. 2003/0195008), further in view of Lin (U.S. Pat. No. 6,393,292).

Regarding **claim 20**, and as applied to claim 1, Ito et al. in view of Mohi et al. disclose the aforementioned method. Ito et al. in view of Mohi et al. fail to clearly specify the aforementioned method further comprising the steps of: prior to the step of transmitting at least a request: determining whether the approximate geographic location of the communication device is different than a previous approximate geographic location of the communication device; and when the approximate geographic location of the communication device is different than a previous approximate geographic location of the communication device, automatically transmitting a map to the communication device, wherein the map corresponds to an area including the approximate geographic location of the communication device.

However in the same of endeavor, Lin disclose the aforementioned method further comprising the steps of: prior to the step of transmitting at least a request: determining whether the approximate geographic location of the communication device is different than a previous approximate geographic location of the communication device (Location updating procedures to transmit the user precise position, wherein a position data is transmitted when a location area change occurs notifying the different location to the network wherein the different location area relates to the communication device current location; *col. 6, lines 1-2 and lines 22-28*); and when the approximate geographic location of the communication device is different than a previous approximate geographic location of the communication device, automatically transmitting a map to the communication device (Means for displaying a map to show the mobile station or communication device user's current location; *col. 7, lines 20-28*), wherein the map corresponds to an area including the approximate geographic location of the communication device (A map display that shows the user's current location graphically; *col. 7, lines 20-28*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ito et al. in view of Mohi et al. positioning/location system to include location updating procedures ultimately conveyed on a graphical display such as a map as taught by Lin. For the purpose of providing user navigation information and guidance functionality for situations in which position changes occur in a constant-rapid fashion carry out by an automobile or other relative fast transportation means.



Regarding **claim 21**, and as applied to claim 20, Ito et al in view of Mohi et al., further in view of Lin disclose the aforementioned method. In addition Mohi et al. disclose wherein the step of receiving the more accurate geographic location comprises the step of receiving information identifying a location of the communication device on the map (A modified representation of the map for providing an spatial or relative location of the communication device such as an icon or arrow displayed within the map; *Page 1 Paragraph 3; Page 3, Paragraphs 58-59; Page 5, Paragraphs 80-81; Page 6, Paragraph 98; Figure 17*).

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Alanara et al. (U.S. Pat. No. 6,061,561)
- b. Kauser et al. (U.S. Pat. No. 5,724,660)
- c. Hollenberg (U.S. Pat. No. 6,091,956)
- d. Agnew et al. (U.S. P.G.-Pub. No. 2002/002439)

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The Examiner can normally be reached on Monday-Friday from 8:00am to 5:00pm.

9. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9301.

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*Ismael Quiñones*

I.Q.

February 2, 2004

*Marsha D Banks-Harold*  
MARSHA D. BANKS-HAROLD  
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